

## DEPARTMENT OF COMMERCE

**Patent and Trademark Office** 

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	
09/462,	995 01/1	4/00 LANGLOIS	В	RN97075
-		HM22/0811	EXAMINER	
JEAN-LO	UIS SEUGNE	MAIER,L		
RHODIA	INC		ART UNIT	PAPER NUMBER
CN 7500			1623	5
CHNDUK	Y NJ 08512		DATE MAILED:	08/11/00

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

## Office Action Summary

Application No. **09/462,995** 

Applican-(s)

Examiner

Leigh Maier

Langlois
Group Art Unit

1623



Responsive to communication(s) filed on	
☐ This action is <b>FINAL</b> .	
☐ Since this application is in condition for allowance except for formal matters, in accordance with the practice under Ex parte QuayNe35 C.D. 11; 453 O.G. 213.	as to the merits is closed
A shortened statutory period for response to this action is set to expire3month(s), o longer, from the mailing date of this communication. Failure to respond within the period for respapplication to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under 37 CFR 1.136(a).	ponse will cause the
Disposition of Claim	
	_ is/are pending in the applicat
Of the above, claim(s) is/a	are withdrawn from consideration
☐ Claim(s)	
	is/are rejected.
☐ Claim(s)	is/are objected to.
☐ Claims are subject to re	estriction or election requirement.
Application Papers  See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.  The drawing(s) filed on is/are objected to by the Examiner.  The proposed drawing correction, filed on isapproveddie	sapproved. n
Attachment(s)  Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s)4 Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152	Howard C. Lee Primary Examiner Art Unit 1623

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

**DETAILED ACTION** 

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Status of the Claims

Claims 1-21 have been canceled. Claims 22-44 have been added and are pending.

**Priority** 

Acknowledgement is made of claim to foreign priority. Documents have been received in this national stage application from the International Bureau.

Claim Rejections - 35 U.S.C. § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 22 recites "...a deacetylated xanthan...", but claim 29 recites "...the percentage of acetyl groups in the xanthan gum is less than 3%.", so "deacetylated" clearly does not mean 100% deacetylated. Furthermore, the 3% figure is unclear as to whether it refers to the total number of OH groups (about 9% acetylation for native xanthan--acetyl/11 OH s) or the number of inner mannose moieties.

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Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 22-26, 28-35, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Doherty et al (EP 0765939).

Doherty et al disclose a solution of non-acetylated xanthan, 1000 ppm of xanthan in 50,000 ppm of NaCl brine. (See p 10, example 7) The non-acetylated xanthan is disclosed as a viscosifying agent for aqueous solutions, particularly for use in oil recovery.

Claims 22, 24-26, and 36-44 are rejected under 35 U.S.C. 102(b) as anticipated by Patton et al (GB 1,080,248).

Patton et al disclose the use of carbohydrates produced by the genus Xanthomonas, xanthan gum, in drilling fluids. The precipitation step involved in the preparation of these carbohydrates that leads to deacetylation. (Page 2, lines 95-100) Patton et al also disclose the use of additives: weighting compounds such as barium sulfate; mineral colloids such as bentonite; and fluid loss control agents such as carboxymethylcellulose. (Page 3, lines 89-128)

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Claim Rejections - 35 U.S.C. § 102 or § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 22, 24, 25, 27, and 36 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sandiford (US 4,069,869).

Sandiford teaches the use of water soluble polymers such as heteropolysaccharides produced by the genus Xanthomonas with sodium silicate for solutions used in enhanced oil recovery. (See col 2, lines 58-69; col 6, lines 4-29; col 7, line 65 through col 8, line 4) Sandiford does not specifically teach the use of deacetylated xanthan; however, it is an inherent property that xanthan is deacetylated during preparation. (See Patton, et al, *supra*)

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Given that the applicant's definition of deacetylation is unclear, the scope of deacetylation may be different. In that case, the known rheological property of deacetylated xanthan, that is, being a better viscosofier than native xanthan, (See Doherty, et al, page 4, lines 13-17 and 31-34) would have made it obvious to have used the deacetylated polysaccharide. Sandiford uses the water-soluble polymer because of their ability to form viscous solutions at relatively low concentrations. (See col 3, lines 31-33) The skilled artisan would have been motivated to have used deacetylated xanthan, the superior viscosifier, in place of the native to obtain the benefit of a lower concentration necessary to prepare an adequately viscous solution.

## Examiner's hours, phone & fax numbers and other useful information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh Maier whose telephone number is (703) 308-4525 and e-mail address is Leigh. Maier@uspto.gov (NOTE: *The U.S PTO does not accept responsibility for the security of e-mail transmissions by the applicant(s)*. Thus, e-mail sent to an examiner should not include confidential information. For further details, see the PTO Internet Usage Policy which has been published in the Federal Register of 21 June 1999, volume 64, number 118.) The examiner can normally be reached on Monday-Friday 8:00 to 4:30 (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Gary Geist (703) 308-1701, may be contacted. The fax phone number for Group 1600, Art Unit 1623 is (703) 308-4556 or 305-3592.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-1235.

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Applicant(s) may pay patent maintenance fees, non-filing application fees and maintain USPTO accounts through http://www.uspto.gov/web/offices/ac/comp/fin/clonedefault.htm

Leigh C. Maier Patent Examiner August 9, 2000

Howard C. Lee Primary Examiner Art Unit 1623